

## CLAIMS

What is claimed is:

1           1.     An apparatus, comprising:  
2           a tray for holding a media stack;  
3           a sensor; and  
4           a transport mechanism to move the tray past the sensor to scan a side of  
5 the media stack.

1           2.     The apparatus of Claim 1, further comprising a housing and  
2 wherein  
3           the sensor is coupled to the housing such that the sensor is held  
4 stationary relative to the housing; and  
5           the transport mechanism is coupled to the housing and the tray..

1           3.     A media source, comprising:  
2           a tray for holding a media stack;  
3           a transport mechanism operable to move the tray between a first position  
4 in which the media stack can be loaded onto the tray and a second position in  
5 which a sheet from the media stack loaded onto the tray can be fed into a print  
6 path of an imaging device; and  
7           a sensor positioned so that it can scan a side of the media stack as the  
8 transport mechanism moves the tray between the first and second positions.

1           4.     The media source of Claim 3, further comprising a support holding  
2 the sensor stationary relative to the motion of the tray caused by the transport  
3 mechanism.

1           5.     The media source of Claim 3, wherein the tray, the transport  
2 mechanism, and the sensor are components of the imaging device.

1     6.     A media source, comprising:  
2             a tray for holding a media stack;  
3             means for moving the tray between a first position and a second position;  
4     and  
5             means for scanning a side of the media stack with the tray between the  
6     first position and the second position.

1             7.     The media source of Claim 6, wherein:  
2             the media stack can be loaded onto the tray when the tray is in the first  
3     position; and  
4             a sheet from the media stack can be fed into a print path of an imaging  
5     device when the tray is in the second position.

1             8.     The media source of Claim 6, wherein the means for scanning  
2     include means for scanning the side of the media stack as the tray is moved  
3     between the first position and the second position.

1             9.     A data identification system, comprising:  
2             a tray for holding a media stack, the media stack having a side with a  
3     pattern to encode information related to data;  
4             a transport mechanism operable to move the tray between a first position  
5     and a second position;  
6             a sensor positioned to scan the pattern as the transport mechanism  
7     moves the tray between the first position and the second position; and  
8             logic coupled to the sensor and operable to decipher the pattern to  
9     identify the data.

1             10.    The data identification system of Claim 9, wherein:  
2             the media stack can be loaded onto the tray when the tray is in the first  
3     position; and  
4             a sheet from the media stack can be fed into a print path of an imaging  
5     device when the tray is in the second position.

1           11.    The data identification system of Claim 9, further comprising a  
2 support holding the sensor stationary relative to the motion of the tray caused  
3 by the transport mechanism.

1           12.    The data identification system of Claim 9, wherein the pattern  
2 encodes a reference and the control logic is operable to retrieve an entry in a  
3 look-up table corresponding the reference, the entry including the data.

1           13.    The data identification system of Claim 9, wherein the data  
2 includes parameter settings and the control logic is operable to decipher the  
3 pattern to identify the parameter settings.

1           14.    The data identification system of Claim 9, wherein the data  
2 includes a media type and the control logic is operable to decipher the pattern to  
3 identify the media type.

1           15.    The data identification system of Claim 14, wherein the control  
2 logic is operable to select parameter settings according to the media type.

1           16.    The data identification system of Claim 9, wherein the tray, the  
2 transport mechanism, the sensor, and the control logic are components of an  
3 imaging device.

1           17.    The data identification system of Claim 9, wherein the pattern  
2 includes a consecutive series of sub-patterns with each sub-pattern encoding  
3 information relating to the data for the sheets on which that sub-pattern is  
4 formed, and wherein the control logic is operable to decipher each sub-pattern to  
5 identify the data relating to that sub-pattern.

1           18.    The data identification system of Claim 9, wherein the data  
2 includes an expected number of sheets of media in the media stack on which  
3 the pattern is imprinted, and the control logic is operable to decipher the pattern  
4 to identify the expected number of sheets.

1           19.    An imaging device, comprising:  
2           a print engine operable to form an image on a sheet of media;  
3           a media source operable to supply a media stack, the media source  
4 including:  
5                   a tray for holding the media stack, the media stack having a  
6                   side with a pattern encoding information corresponding to imaging  
7                   data;  
8                   a transport mechanism operable to move the tray between a  
9                   first position and a second position;  
10                  a sensor positioned to scan the pattern as the transport  
11                  mechanism moves the tray between the first position and the  
12                  second position;  
13           a transfer mechanism operable to transfer sheets of media from the media  
14 source to the print engine;  
15           control logic in communication with the media source, the print engine,  
16 and the transfer mechanism, the control logic operable to identify the imaging  
17 data and to control the operation of transfer mechanism the operation of the  
18 print engine according to the imaging data.

1           20.    The imaging device of Claim 19, wherein:  
2           the media stack can be loaded onto the tray when the tray is in the first  
3 position; and  
4           a sheet form the media stack can be supplied to the print engine when  
5 the tray is in the second position.

1           21.    The imaging device of Claim 19, further comprising a user interface  
2 in communication with the control logic and wherein the control logic is operable  
3 to cause the user interface to generate a display corresponding, at least  
4 indirectly, to the imaging data.

1           22.    The imaging device of Claim 21, wherein the control logic is  
2 operable to cause the user interface to generate a display that includes user  
3 selectable options corresponding, at least indirectly, to the imaging data.

1           23.    The imaging device of Claim 19, wherein the imaging data includes  
2 imaging parameter settings, the imaging device further comprising a user  
3 interface in communication with the control logic and capable of displaying  
4 information to a user and wherein the control logic is operable to cause the user  
5 interface to display information corresponding to the imaging parameter settings.

1           24.    The imaging device of Claim 19, wherein the pattern includes a  
2 consecutive series of sub-patterns with each pattern encoding information  
3 relating to imaging data for the sheets on which that sub-pattern is formed, and  
4 wherein the control logic is operable to decipher each sub-pattern to identify the  
5 imaging data relating to that sub-pattern and to control the operation of the print  
6 engine according to the imaging data pertaining to a particular sheet being used.

1           25.    The imaging device of Claim 19, wherein the imaging data includes  
2 an expected number of sheets of media in the media stack on which the pattern  
3 is imprinted, the imaging device further comprising a user interface in  
4 communication with the control logic and wherein the control logic is further  
5 operable to cause the user interface to generate a display corresponding, at least  
6 indirectly, to the expected number of sheets.

1           26.    An imaging device, comprising:  
2           a print engine operable to form an image on a sheet of media;  
3           a first media source operable to supply a first media stack, the first media  
4 source including:

5                   a first tray for holding the first media stack, the first media  
6                   stack having a side with a first pattern encoding information  
7                   corresponding to first imaging data;

8                   a first transport mechanism operable to move the first tray  
9                   between a first position and a second position;

1                   a first sensor positioned to scan the first pattern as the first  
2                   transport mechanism moves the first tray between the first  
3                   position and the second position;  
4                   a second media source operable to supply a second media stack, the  
5 second media source including:  
6                   a second tray for holding the second media stack, the  
7                   second media stack having a side with a second pattern encoding  
8                   information corresponding to second imaging data;  
9                   a second transport mechanism operable to move the second  
10                  tray between a first position and a second position;  
11                  a second sensor positioned to scan the second pattern as  
12                  the second transport mechanism moves the second tray between  
13                  the first position and the second positions;  
14                  a transfer mechanism operable to transfer sheets of media from the first  
15 and second media sources to the print engine;  
16                  control logic in communication with the first and second media sources,  
17 the print engine, and the transfer mechanism, the control logic operable to  
18 decipher the first and second patterns to identify the first and second imaging  
19 data and to control the operation of the transfer mechanism and to control the  
20 operation of the print engine so that the first imaging data is used when a media  
21 sheet is transferred from the first media source and the second imaging data is  
22 used when a media sheet is transferred from the second media source.

1           27.    The image forming device of Claim 26, further comprising a user  
2 interface in communication with the control logic, wherein the control logic is  
3 operable to cause the user interface to generate a display corresponding, at least  
4 indirectly, to the first and second imaging data.

1           28.    A method comprising:  
2           providing a tray for holding a media stack having a side with a pattern,  
3 the tray being moveable between a first position and a second position ;  
4           moving the tray between the first position and the second position;

1 scanning the pattern as the tray is moved between the first position and  
2 the second position; and  
3 deciphering the pattern to identify data corresponding to the pattern.

1 29. The method of Claim 28, wherein moving includes moving the tray  
2 between a first position in which the media stack can be loaded onto the tray  
3 and a second position in which a sheet from the media stack can be fed into a  
4 print path of an imaging device.

1 30. The method of Claim 28, wherein scanning comprises scanning the  
2 pattern using a sensor whose position is held stationary relative to the motion of  
3 the tray.

1 31. The method of Claim 28, wherein the pattern encodes a reference  
2 and wherein deciphering comprises retrieving an entry in a look-up table  
3 corresponding to the reference, the entry including the data.

1 32. The method of Claim 28, wherein the data includes imaging  
2 parameter settings and deciphering comprises deciphering the pattern to identify  
3 the imaging parameter settings .

1 33. The method of Claim 28, wherein the data includes a media type  
2 and deciphering comprises deciphering the pattern to identify the media type.

1 34. The method of Claim 33, further comprising selecting imaging  
2 parameter settings according to the media type.

1 35. The method of Claim 28, further comprising causing a user  
2 interface to generate a display corresponding, at least indirectly, to the data.

1 36. The method of Claim 28, further comprising, identifying a sheet as  
2 being a sheet retrieved from the media stack and forming an image on the sheet  
3 according to the data.

1           37.    The method of Claim 28, wherein the pattern encodes information  
2 corresponding to first data, the method further comprising:

3           identifying a first sheet as being a sheet retrieved from the media stack  
4 and instructing the formation of an image on the sheet according to the first  
5 data; and

6           identifying a second sheet as not being a sheet retrieved from the media  
7 stack and instructing the formation of an image on the sheet according to  
8 second data different from the first data.

1           38.    The method of Claim 28 wherein the pattern includes a  
2 consecutive series of sub-patterns with each pattern encoding information  
3 relating to data for the sheets on which that sub-pattern is formed, and wherein  
4 deciphering the pattern to identify the data includes deciphering each sub-  
5 pattern to identify the data relating to that sub-pattern.

1           39.    The method of Claim 28, wherein the data includes an expected  
2 number of sheets, and deciphering comprises deciphering the pattern to identify  
3 the expected number of sheets.

1           40.    A computer readable medium having instructions for:  
2           directing a transport mechanism to move a tray between a first position  
3 media and a second position;  
4           causing a sensor to scan a pattern on a side of the media stack as the  
5 transport mechanism moves the tray between the first position and the second  
6 position, the pattern encoding information corresponding to data; and  
7           deciphering the pattern to identify the data.

1           41.    The medium of Claim 40, wherein the pattern encodes a reference  
2 and the instructions for deciphering include instructions for retrieving an entry in  
3 a look-up table corresponding to the reference, the entry including the data.



1           42.    The medium of Claim 40, wherein the data includes imaging  
2 parameter settings, and the instructions for deciphering include instructions for  
3 deciphering the pattern to identify the imaging parameter settings.

1           43.    The medium of Claim 40, wherein the data includes a media type,  
2 and the instructions for deciphering include instructions for deciphering the  
3 pattern to identify the media type.

1           44.    The medium of Claim 43, having further instructions for selecting  
2 imaging parameter settings according to the media type.

1           45.    The medium of Claim 40, having further instructions for causing a  
2 user interface to generate a display corresponding, at least indirectly, to the  
3 data.

1           46.    The medium of Claim 40, having further instructions for identifying  
2 a sheet as being a sheet retrieved from the media stack and instructing the  
3 formation of an image on the sheet according to the data.

1           47.    The medium of Claim 40, wherein the pattern encodes information  
2 corresponding to first data, the medium having further instructions for:  
3           identifying a first sheet as being a sheet retrieved from the media stack  
4 and instructing the formation of an image on the first sheet according to the first  
5 data; and  
6           identifying a second sheet as not being a sheet retrieved from the media  
7 stack and instructing the formation of an image on the second sheet according  
8 to second data different from the first data.

1           48.    The medium of Claim 40, wherein the pattern includes a  
2 consecutive series of sub-patterns with each pattern encoding information  
3 relating to data for the sheets on which that sub-pattern is formed, and wherein  
4 the instructions for deciphering the pattern to identify the data include

1 instructions for deciphering each sub-pattern to identify the data relating to that  
2 sub-pattern.

1 49. The medium of Claim 40, wherein the data includes an expected  
2 number of sheets on which the pattern is imprinted, and the instructions for  
3 deciphering include instructions for deciphering the pattern to identify the  
4 expected number of sheets.